



ANNUAL REPORT
OF THE
Department of Public Works
OF THE
PROVINCE OF ALBERTA
1946-47

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

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1947

Edmonton, September 2, 1947.

TO HIS HONOUR,

J. C. BOWEN,

Lieutenant Governor of the Province of Alberta.

SIR:

The undersigned has the honour to submit herewith the Report of the Department of Public Works for the year ended March 31, 1947.

Respectfully submitted,

W. A. FALLOW,

Minister of Public Works.

CONTENTS

	Page
Report of Deputy Minister of Public Works	7
Main Highways Maintenances, District Highways and Local Roads and Ferries	9
Bridges Construction and Maintenance	14
Main Highways Construction	15
Surveys Branch	20
Town and Rural Planning Advisory Board	22
Buildings, Maintenance and Construction	24
Mechanical Branch administration of The Factories Act, The Boilers Act and Provincial Power Plants	26
Highway Traffic Board	37
Provincial Gaol, Fort Saskatchewan	40
Provincial Gaol, Lethbridge	43

GOVERNMENT OF THE PROVINCE OF ALBERTA

DEPARTMENT OF PUBLIC WORKS

REPORT

OF THE

DEPUTY MINISTER OF PUBLIC WORKS

For the Fiscal Year Ended March 31st, 1947

HON. W. A. FALLOW,
Minister of Public Works

SIR:

I have the honour to submit herewith the report covering the activities of the Department of Public Works for the fiscal year ended March 31st, 1947.

HIGHWAYS, BRIDGES AND SURVEYS

The mileage of main highways maintained during the year was 4,215.58, being 231.42 miles increase over the previous year. The sum of \$1,119,670.28 was expended for reconstruction and maintenance of Main Highways. The sum of \$1,086,646.72 was expended for construction and maintenance of District Highways and Local Roads.

An extensive programme was carried out by the Main Highways Construction Branch which included the grading of 370.97 miles of highway. Of this mileage, 352.23 miles were standard earth grade and 18.74 miles grade re-conditioned. In addition, 583.75 miles were gravel surfaced. A total of 100.31 miles of base course was placed during the season together with 107.55 miles of two-inch Hot Plant Mix surface course and 19.43 miles of Asphaltic Surface Treatment, and 78.47 miles of Asphaltic Seal Coat. Included in the foregoing figures are 78.82 miles of grading and 24.02 miles of gravel surfacing completed on the Grimshaw Highway under Dominion-Provincial Agreement.

The work of the Bridge Branch included erection of steel and timber bridges and culverts on Main Highways. All steel bridges were fabricated within the Province. Two steel spans were constructed on the Grimshaw-Slave Lake Highway, under Agreement with the Dominion Government, one a 175 ft. span over the Meikle River and an 80 ft. span over the South Keg River. Hay and Steen River Bridges were under construction but not completed by the end of the year. Four Steel Bridges and 134 Timber Bridges were constructed, six steel bridges reconstructed, 85 timber and 40 steel bridges were repaired making a total of 273 bridges dealt with during the year including four steel bridges under construction.

The total sum expended under Post-War Reconstruction was \$1,138,312.14. Of this amount the sum of \$790,607.56 was on the Grimshaw Highway under Dominion-Provincial Agreement. New Nurses' Home at the University of Alberta Hospital \$279,787.64, on Bridges \$1,102.87, on Stream Control \$235.00, on Aircraft \$59,579.07.

and \$7,000.00 Miscellaneous. One Aircraft was sold for the sum of \$32,729.90 including accessories, the purchase of which is included in the above expenditure of \$59,579.07.

The report of the Director of Surveys shows an increase in the number of surveys carried forward to the ensuing year and an increase in plans submitted by Municipal Districts.

TOWN AND RURAL PLANNING ADVISORY BOARD

The Town Planning Act, 1929, is administered by the above Board, and the activities are covered by the report of the Director of Town Planning.

BUILDINGS

All public buildings and institutions were repaired and maintained in order to keep them up to standard requirements

Details of maintenance, alterations, additions and construction of buildings are contained in the report of the Superintendent of Buildings.

MECHANICAL BRANCH

The Boilers, Factories and Electrical Protection Acts, as well as operation of the provincially owned power plants, are under the jurisdiction of the above branch and these activities are covered by the report of the Mechanical Superintendent.

HIGHWAY TRAFFIC BOARD

The Public Service Vehicles Act, 1936, is administered by the above Board. An increase in mileage covered by public service vehicles over the mileage of the previous fiscal year is reported.

PROVINCIAL GAOLS

Reports on these institutions show an average daily population for the year of approximately 420 prisoners, compared with 331 the previous year. The average net cost per prisoner for the period is lower than last year.

Respectfully submitted,

G. H. N. MONKMAN,
Deputy Minister.

MAIN HIGHWAYS MAINTENANCE
DISTRICT HIGHWAYS AND LOCAL ROADS
FERRIES, OPERATION, MAINTENANCE AND
REPLACEMENTS

(A. FRAME, *Superintendent of Maintenance*)

The maintenance of Main Highways, District Highways, Local Roads and Ferries was under the supervision of ten District Engineers

Detailed information covering expenditure for the fiscal year 1946-47 is contained in the following statements submitted with this report:

1. Statement showing expenditure on maintenance of main highways. The total mileage of this class of highway is 4,215.58 miles. Expenditure as shown by the statement amounted to \$1,119,670.28
2. A statement showing the distribution from both capital and income accounts of expenditure on the maintenance and construction of district highways and local roads. A total expenditure of \$1,086,646.72 was made in this way
3. A statement showing in detail the expenditure made in connection with the operation, maintenance and reconstruction of ferries from income account. There were 54 ferries operated by the Province during the season with a total expenditure on ferry operation and maintenance of \$153,258.83.
4. Snow conditions during the past winter have been most severe, especially in the southern part of the Province. Snow ploughing has been carried on during the whole winter on practically all main and secondary highways.

EXPENDITURE FOR MAINTENANCE OF MAIN HIGHWAYS

For Year Ended March 31, 1947

Location	Miles	Amount
Walsh to Bassano	142.57	\$ 32,403.50
Medicine Hat to Grassy Lake	48.91	6,771.37
Carway to Nanton	105.70	21,467.51
Grassy Lake to Crowsnest	155.21	57,827.05
Lethbridge to Coutts	62.57	11,596.77
Lethbridge to Waterton	78.01	34,446.80
Pincher to Waterton	32.28	31,055.65
Monarch to Carmangay	26.68	4,932.90
Lethbridge to Iron Springs	24.49	8,821.63
Cardston to Emigrant Gap	17.25	1,019.25
Bassano to Banff	152.36	48,278.23
Nanton to Drisbury	87.51	23,915.13
Okotoks to N.E. 17-18-2-5	23.95	10,349.92
Calgary to Bowness Park	4.70	396.77
Inverlake to S.E. 16-28-21-4	57.54	19,174.45
S.E. 16-28-21-4 to Alask	147.72	27,271.73
Drumheller to Wayne	7.70	2,415.80
Beiseker to Twinning	26.20	4,148.59
Midnapore to Black Diamond	30.85	7,119.41
Carmangay to High River	63.44	13,975.05
Vulcan Corner to Cheadle	43.60	6,295.70
Carbon- West and South	16.65	1,459.21
Wetaskiwin to Edmonton	38.21	10,789.54
Hayter to Wetaskiwin	163.94	31,526.56

DEPARTMENT OF PUBLIC WORKS

Location	Miles	Amount
Butze to Edmonton	178 95	\$32,499 01
Ft Saskatchewan to Chipman Corner	37 69	9,500 49
Lloydminster to Edmonton	152 78	46,229 00
Lloydminster South	31 85	2,484 84
Battle River to Viking	50 00	2,720 66
Leduc to 4 miles North of Breton	23 30	5,808 53
Cooking Lake Highway to Airport	1 30	172 38
Wainwright to Vermilion	37 16	1,762 90
Andrew to Two Hills	35 11	7 35
Didsbury to Wetaskiwin	100 63	37,020 59
Red Deer to Nordegg	106 83	25,095 14
Compeer to Nevis	155 02	29,172 72
Nevis to Rimbey	66 26	17,782 77
Wetaskiwin to Pigeon Lake	28 22	8,104 88
Bentley to Sylvan Lake	11 10	3,628 49
Twinning to Nevis	60 71	11,589 87
Olds to Sundre	24 18	10,936 74
Hanna to Battle River	61 00	4,396 93
Penhold to Lousana	28 00	1,625 57
Waskatenau to St Paul-Cold Lake	110 00	38,899 09
Edmonton to Jasper Park Boundary	199 46	82,836 07
Jasper Highway to Edmonton Beach	2 32	118 76
Jasper Highway to Kapasiwin Beach	2 48	21 92
Jasper Highway to Seba Beach	2 13	199 19
Fulston to McLeod River	9 31	3,582 16
Alberta Beach Road	6 45	744 99
To Country Club	2 30	110 40
Carvel Corner to Whitecourt	96 00	16,964 45
Bickerdike to Mountain Park	65 88	1,546 12
Leyland to Luscar	4 19	292 97
Coalspur to Foothills	12 31	34 95
Edmonton to Faust	218 38	63,154 68
Edmonton to Fort Saskatchewan Bridge	11 65	10,951 40
Clyde to Barrhead Corner	31 30	7,615 12
Edmonton to 3 Miles North and East of Radway	55 65	23,999 29
Namoo to Gibbons	17 47	2,466 14
Westlock to Flatbush	46 21	3,286 14
Dunvegan to Pouce Coupe	121 62	40,321 13
Triangle to Grande Prairie	107 44	21,121 46
Faust to Dunvegan	190 72	38,112 30
Grimshaw to Notikewin and North	148 18	23,717 39
General		40,863 29
	4215 58	\$1,088,956 79

ADD

Reconstruction Expenditure by Construction Branch from Maintenance Funds (Appropriation 706BH) (Mileage included above)		
Administration	\$	11 80
Carstairs to Bowden		500 00
Kinuso to Arcadia		7,412 61
Peace River to 6th Meridian		273 79
Drumheller to Wayne		848 52
Lloydminster to Vermilion		14,662 10
Vermilion to Innisfree		4,386 61
Innisfree to Vegreville		544 87
Valleyview to 6th Meridian		2,073 10
TOTAL		\$1,119,670 28

EXPENDITURE ON CONSTRUCTION AND MAINTENANCE OF DISTRICT HIGHWAYS
AND LOCAL ROADS

For the Year Ended March 31, 1947

I D or M D.	Income	Capital	Total
I D 1	\$ 630.41		\$ 630 41
M D 2		\$ 4,000 00	4,000 00
I D 3	17,823 73		17,823 73
M D 4		4,250 00	4,250 00
M D 5		6,000 00	6,000 00
M D 6	257 20	3,000 00	3,257 20
M D 9		6,000 00	6,000 00
I D 10	923 47		923 47
I D 11	11,964 16		11,964 16
M D 12		2,500 00	2,500 00
M D 13		599 10	599 10
M D 14		4,000 00	4,000 00
I D 15	12,569 73		12,569 73
M D 16		4,500 00	4,500 00
I D 21	6,930 45		6,930 45
I D 22	559 32		559 32
I D 23	3,525 40		3,525 40
M D 25		2,500 00	2,500 00
M D 26		7,000 00	7,000 00
I D 27	2,562 44		2,562 44

ANNUAL REPORT, 1946-47

11

I.D. or M.D	Income	Capital	Total
I.D. 28	\$14,580.26		\$14,580.26
M.D. 29		\$6,000.00	6,000.00
M.D. 30		4,000.00	4,000.00
M.D. 31		6,000.00	6,000.00
M.D. 32		6,000.00	6,000.00
M.D. 33		2,000.00	2,000.00
I.D. 34	1,650.16		1,650.16
M.D. 40		5,000.00	5,000.00
I.D. 41	977.82		977.82
I.D. 42	5,978.88		5,978.88
M.D. 43		5,000.00	5,000.00
M.D. 44		4,748.14	4,748.14
M.D. 45		1,500.00	1,500.00
I.D. 46	21,248.13		21,248.13
M.D. 47		9,611.00	9,611.00
M.D. 48		10,000.00	10,000.00
M.D. 49		10,000.00	10,000.00
I.D. 50	6,559.72		6,559.72
M.D. 52		5,000.00	5,000.00
M.D. 53		8,000.00	8,000.00
M.D. 54		15,000.00	15,000.00
M.D. 55		7,500.00	7,500.00
M.D. 56		3,000.00	3,000.00
M.D. 57		4,000.00	4,000.00
I.D. 58	150.69		150.69
M.D. 61		10,000.00	10,000.00
M.D. 62		12,000.00	12,000.00
M.D. 63		12,000.00	12,000.00
M.D. 64		9,000.00	9,000.00
I.D. 65	43,303.16		43,303.16
M.D. 66		8,000.00	8,000.00
M.D. 67		3,000.00	3,000.00
I.D. 68	155.59		155.59
I.D. 69	25.50		25.50
M.D. 71		19,417.49	19,417.49
M.D. 72		10,000.00	10,000.00
M.D. 73		8,000.00	8,000.00
M.D. 74		7,000.00	7,000.00
M.D. 75		8,000.00	8,000.00
I.D. 76	42,337.98		42,337.98
I.D. 77	22,735.48		22,735.48
I.D. 78	14,126.94		14,126.94
I.D. 79	16,991.91		16,991.91
M.D. 81		12,000.00	12,000.00
M.D. 82		8,000.00	8,000.00
M.D. 83		7,500.00	7,500.00
M.D. 84		9,000.00	9,000.00
I.D. 85	1,018.18		1,018.18
M.D. 86	549.14	11,885.00	12,434.14
M.D. 87	250.00	2,000.00	2,250.00
M.D. 88		500.00	500.00
M.D. 89		9,482.75	9,482.75
M.D. 90		8,000.00	8,000.00
M.D. 91		5,000.00	5,000.00
M.D. 92		12,000.00	12,000.00
M.D. 93		10,000.00	10,000.00
M.D. 94		2,500.00	2,500.00
I.D. 95	11,818.00		11,818.00
I.D. 101	35,205.14		35,205.14
I.D. 102	57,887.60		57,887.60
M.D. 103		3,000.00	3,000.00
I.D. 104	7,726.70		7,726.70
M.D. 105		4,000.00	4,000.00
M.D. 106		1,200.00	1,200.00
I.D. 107	8,708.47		8,708.47
I.D. 108	11,299.35		11,299.35
I.D. 109	12,164.43		12,164.43
I.D. 111	4,886.72		4,886.72
I.D. 122	7,545.95		7,545.95
I.D. 124	1,593.59		1,593.59
I.D. 125	9,733.99		9,733.99
I.D. 126	7,337.33		7,337.33
M.D. 127		15,000.00	15,000.00
I.D. 128	1,326.13		1,326.13
I.D. 129	698.99		698.99
I.D. 130	15,888.08		15,888.08
I.D. 131	9,812.30		9,812.30
I.D. 132	17,723.04		17,723.04
M.D. 133	1,470.95	2,500.00	3,970.95
I.D. 134	21,068.20		21,068.20
M.D. 135		2,000.00	2,000.00
M.D. 136		3,000.00	3,000.00
I.D. 138	6,792.30		6,792.30
I.D. 139	15,422.48		15,422.48
I.D. 143	2,583.15		2,583.15
I.D. 147	2,356.18		2,356.18
General	32,304.52	1,679.39	33,983.91

DEPARTMENT OF PUBLIC WORKS

I.D. or M.D.	Income	Capital	Total
Appropriations to Indian Reserves:			
D1	\$ 361 81		\$ 361.81
D2	481 51		481 51
D4	1,546 16		1,546 16
D6	1,036 69		1,036 69
D7	797 71		797 71
D8	1,325 00		1,325 00
Row West Special Areas	2,340 02		2,340 02
Special Areas Various		\$ 40,000 00	
	<u>\$561,628 34</u>	<u>\$433,372 87</u>	<u>\$995,001 21</u>

Special Grants:	
M D 5	\$ 1,000 00
M D 6	2,600 00
M D 9	350 00
M D 16	886 45
M D 25	2,231 23
M D 26	1,800 00
M D 31	2,500 00
M D 32	1,000 00
M.D. 40	1,500 00
M.D. 43	1,500 00
M D 44	917 85
M D 45	316 47
M D 47	79 33
M D 48	2,926 90
M D 49	4,650 00
M D 54	1,000 00
M.D. 55	7,000 34
M D 56	5,000 00
M D 57	2,100 00
M D 63	2,100 00
M.D. 64	3,175 50
M D 66	3,700 00
M D 67	1,000 00
M D 72	880 00
M.D. 74	2,450 00
M.D. 75	7,100 00
M D 81	1,416 39
M.D. 84	2,250 00
M D 90	900 00
M D 91	7,699 24
M D 93	6,765 81
M.D. 94	3,000 00
M.D. 105	2,600 00
M D 106	250 00
M.D. 127	8,000 00
M.D. 135	1,000 00
	<u>\$653,273 85</u>

SUMMARY

Income Account—Appropriation 707-B	\$ 561,628.34
Appropriation 707-B-3	91,645.51
	<u>\$ 653,273 85</u>
Capital Account—Appropriation 771-B	433,372 87
	<u>\$1,086,646 72</u>

EXPENDITURE ON OPERATION, MAINTENANCE AND REPLACEMENT OF
FERRIES

FOR THE YEAR ENDED MARCH 31st, 1947

Location	River	Operation and Maintenance	Replacements and Installation	Total
Desjarlais ..	North Saskatchewan	\$ 2,406 90		\$ 2,406 90
Holmes Crossing ..	Athabasca	3,154 24	\$ 3,634 19	6,788 43
Dorothy	Red Deer	1,435 81	44 07	1,499 88
Pakan	North Saskatchewan	2,147 76		2,147 76
Garrington ..	Red Deer	2,775 63	3,775 65	6,551 28
*North of Lloydminster	North Saskatchewan	840 09		840 09
Athabasca	Athabasca	3,647 64		3,647 64
Tolman Crossing ..	Red Deer		2,320 13	2,320 13
Letts Crossing ..	Pembina	1,094 44		1,094 44
Shandro	North Saskatchewan	2,523 25	72 58	2,595 83
Hopkins	North Saskatchewan	1,012 60	2,815 20	3,827 80
Hulton	Red Deer		469 27	469 27
Lac Ste Anne ..	Narrows	911 24		911 24
Iea Park	North Saskatchewan	2,391 02	112 27	2,503 29
Eldorena	North Saskatchewan	1,814 32	44 07	1,858 39
Sangudo	Pembina	1,059 40		1 059 40
South of Holburn ..	North Saskatchewan	990 35		990 35
Dunvegan	Peace	3,432 89		3,432 89
Row Island	South Saskatchewan	1,377 43	1 65	1,379 08
North of Myrnam ..	North Saskatchewan	2,854 74	2,411 11	5,265 85
Genesee	North Saskatchewan	1,321 87	7 78	1,329 65
Steveville	Red Deer	1,763 11	38 47	1,801 58
Goodwin Crossing ..	Smoky	4,371 23	572 47	4,943 70

Location	River	Operation and Maintenance	Replacements and Installation	Total
West of Munson	Red Deer	\$1,248.07	\$ 1.65	\$1,249.72
Berrymoor	North Saskatchewan	4,403.99	1,041.41	5,445.40
Finnegan	Red Deer	1,049.71	28.53	1,078.24
Lindbergh	North Saskatchewan	1,408.33	98.22	1,506.55
Allendale Crossing	McLeod	1,113.71	42.30	1,156.01
Vinca Crossing	North Saskatchewan	990.43		990.43
McLeod Valley	McLeod	2,472.94	3,447.08	5,920.02
North of Jenner	Red Deer	1,202.52	65.72	1,268.24
Gregory Crossing	Red Deer	1,135.98	46.92	1,182.90
Elk Point	North Saskatchewan	2,935.72	2,088.74	5,024.46
West of Morrin	Red Deer	2,884.99	142.87	3,027.86
South of Falher	Little Smoky	1,002.59	1,923.16	2,925.75
Grovedale	Wapiti	1,619.25	146.88	1,766.13
Klondyke Crossing	Athabasca	1,394.09		1,394.09
Flatbush	Pembina	2,236.26	1,203.26	3,439.52
South of Wembley	Wapiti	2,289.42		2,289.42
East Coulee	Red Deer	2,639.88	1.65	2,641.53
West of Fawcett	Pembina	984.11	32.50	1,016.61
South of Crowfoot	Bow	2,344.70	1,585.01	3,929.71
South of Fawcett	Pembina	1,511.38	18.89	1,530.27
Waskatenau	North Saskatchewan	2,135.00	905.47	3,040.47
North of Blue Ridge	Athabasca	2,660.38	874.98	3,535.36
Mahaska	McLeod	967.30		967.30
North of Atlee	Red Deer	1,141.26	473.78	1,615.04
Watino	Smoky	2,617.33	4.90	2,622.23
Forbesville	North Saskatchewan	1,101.16	242.58	1,343.74
South of Empress	South Saskatchewan	2,578.72	304.17	2,882.89
Rosevear	McLeod	1,483.14	3,010.26	4,493.40
Warspite	North Saskatchewan	1,375.09	37.99	1,413.08
Fort Vermilion	Peace	1,368.28		1,368.28
Hensberg	North Saskatchewan	3,102.98	97.07	3,200.05
Rosedale	Red Deer	4,019.55	217.46	4,237.01
Beauvallon	North Saskatchewan	1,523.24		1,523.24
Bowslope	Bow	2,718.60	6,002.46	8,721.06
	General	3,794.86		3,794.86
		\$112,823.92	\$ 40,434.91	\$153,258.83

*This Ferry on 4th Meridian and operated by the Province of Saskatchewan, the Province of Alberta, paying 50% of the Operating Cost

BRIDGE CONSTRUCTION AND MAINTENANCE

April 1, 1946—March 31, 1947

(N. W. MACPHERSON, *Commissioner of Highways and Bridges*)

During the year ten crews were employed on bridge work. Two new steel spans were constructed during the season, 1—220 ft. span over the Sandy River and 1—150 ft span over the Beaver River North of Glendon.

The sub-structure for bridges over the Red Deer River at Red Deer, the Red Deer River at Rosedale Ferry, and the Blindman River at Blackfalds, were constructed. It was impossible to complete due to the shortage of steel. It is hoped to have these bridges open to traffic during 1947

Two steel spans were constructed on the Grimshaw-Slave Lake Highway, under agreement with the Dominion Government, 1—175 ft. span over the Meikle River and 1—80 ft. span over the South Keg River. Three other structures over the North Keg River, Hay and Steen Rivers, were under construction, but not completed by the end of the year

All construction materials were in short supply during the season and this necessitated a large amount of work being carried over until 1947.

Following is a list of bridge work undertaken during the year:

Timber Bridges constructed	134
Timber Bridges maintained	85
Steel Bridges constructed	4
Steel Bridges reconstructed	6
Steel Bridges under construction	4
Steel Bridges maintained	40
Large Culverts replacing Timber Bridges.	31

MAIN HIGHWAYS BRANCH

(N. W. MACPHERSON, *Commissioner of Highways and Bridges*)

During the season 1946 a total of 352.23 miles of highway were graded, 18.74 miles were re-conditioned and 586.77 miles were gravel surfaced

In addition 100.31 miles of Stabilized Base Course were placed together with 107.55 miles of 2-inch Hot Plant Mix Surface Course, 19.43 miles of Asphaltic Surface Treatment and 78.47 miles of Asphaltic Seal Coat.

There was a considerable improvement in the labour and equipment supply this being reflected in the amount of additional work done over the previous year. However the supply was still far short of requirements and it was found necessary to withdraw several projects temporarily due to the lack of interest shown by contractors and the inability of the Department to obtain equipment and labour.

Included in the foregoing figures are 78.82 miles of grading and 24.02 miles of gravel surfacing completed on the Grimshaw Highway under Dominion-Provincial Agreement. These figures do not reflect the true status of this project at the end of the season as much preparatory work such as clearing, establishing camps and lines of communications, etc., which would facilitate next year's operations was also done.

Following is a statement of the work performed during the year ended March 31, 1947:

GRADING MAIN HIGHWAYS			
Location	Miles	Type	Work done by
Calgary to West of Cochrane	16.68	S.E.G.	Contract
Revision West of Cochrane	0.97	S.E.G.	Day Labour
MacLeod to Standoff	17.49	S.E.G.	Contract
Ryeroft to Woking	11.79	S.E.G.	Day Labour
North of Sexsmith to Sexsmith	2.37	S.E.G.	Day Labour
Sexsmith to South of Sexsmith	4.00	S.E.G.	Day Labour
Lethbridge to Craddock	22.21	S.E.G.	Contract
Alix to Stettler	8.78	S.E.G.	Contract
North of Metiskow to Provost	22.91	S.E.G.	Contract
Oliver to Fort Saskatchewan	3.17	S.E.G.	Day Labour
West of Innisfree to Minburn	12.08	S.E.G.	Contract
Stony Creek to Vermilion	10.47	S.E.G.	Contract
Sturgeon Lake to 6th Meridian	27.91	S.E.G.	Day Labour
6th Meridian to 5 Miles West	5.29	S.E.G.	Day Labour
TOTAL	166.12		

S.E.G., Standard Earth Grade—166.12 Miles
By Contract 110.62 Miles By Day Labour 55.50 Miles.

GRADING SECONDARY HIGHWAYS			
Lethbridge to Airport	3.02	S.E.G.	Day Labour
North Star to North of Notikewin	18.74	G.R.	Day Labour
North of Notikewin to 27th Base Line	78.82	S.E.G.	Contract
West of Leduc to North of Breton	23.30	S.E.G.	Day Labour
East of Penhold to Lousana	15.81	S.E.G.	Day Labour
Willingdon to Andrew	12.16	S.E.G.	Day Labour
Two Hills to East of Two Hills	2.39	S.E.G.	Day Labour
Westlock to Dapp	17.09	S.E.G.	Contract
Gounn to Boyle	29.66	S.E.G.	Day Labour
MacLeod River to Coalspur	3.86	S.E.G.	Contract
TOTAL	204.85		

S.E.G., Standard Earth Grade 186.11 Miles G.R. Grade Reconditioning 18.74 Miles
By Contract 99.77 Miles. By Day Labour 105.08 Miles.

DEPARTMENT OF PUBLIC WORKS

GRADING SUMMARY

	Main Highway	Secondary Highway	Totals
Standard Earth Grade	166 12	186 11	352 23
Grade Reconditioning		18 74	18 74
TOTALS	166 12	204 85	370 97
By Contract	110 62	99 77	210 39
By Day Labour	55 50	105 08	160 58
TOTALS	166 12	204 85	370 97

GRAVELLING

FIRST COURSE GRAVEL SURFACING—MAIN HIGHWAYS

	Miles	Work done by
Marleod to Standoff	17 49	Contract
Fairview to South of Fairview	4 10	Day Labour
Rycroft to Woking	11 78	Day Labour
Sexsmith to South of Sexsmith	4 00	Day Labour
Lethbridge to Warner	38 60	Contract
Warner to Coutts	24 30	Contract
Metiskow to Provost	14 36	Day Labour
Alix to Nevis	7 77	Day Labour
Vermilion to Stony Creek	10 47	Day Labour
Innisfree to Minburn	12 08	Day Labour
Oliver to Fort Saskatchewan	3 17	Day Labour
Killam to Galahad	23 56	Contract
Calais to Harper Creek	24 75	Day Labour
Jet No 2 Hwy to East of Jet No 2 Hwy	7 01	Day Labour
TOTAL	203 44	

By Contract 103 95 Miles By Day Labour 99 49 Miles

SECONDARY HIGHWAYS

Lethbridge to Airport	3 02	Day Labour
Dixonville to North Star	21 20	Day Labour
North Star to North of Notukewin	18 74	Contract
5th Mer to Thorsby	5 27	Day Labour
Sangudo to Rochfort Bridge	5 26	Day Labour
North of Notukewin to 25th Base Line	24 02	Contract
Andrew to Harry Hill	20 50	Day Labour
Lac La Biche to Boyle	29 85	Day Labour
MacLeod River to Weald	11 15	Day Labour
TOTAL	139 01	

By Contract 42 76 Miles By Day Labour 96 25 Miles

MISCELLANEOUS

Location	Miles	Work done by
Donnelly to Falher	1 56	Day Labour
Village of Falher	0 17	Day Labour
Village of Rochfort Bridge	0 40	Day Labour
Village of Willingdon	0 30	Day Labour
Hwy No 46 to Flamondon	1 84	Day Labour
Rosedale to East Coulee	1 60	Contract
TOTAL	8 87	

By Contract 1 60 Miles By Day Labour 7 27 Miles

GRAVELLING

REPLACEMENT GRAVEL SURFACING—MAIN HIGHWAYS

Location	Miles	Work done by
Faust to Arcadia	21 40	Day Labour
McLennan to South of McLennan	2 20	Day Labour
McLennan to Donnelly	8 88	Day Labour
Donnelly to North of Donnelly	7 70	Day Labour
Peace River to Top of Hill West	5 40	Day Labour
South of Sexsmith to Grande Prairie	8 15	Day Labour
Grande Prairie to Beaverlodge	26 22	Day Labour
Inverlake to Beiseker	29 81	Contract
Beiseker to East of Beiseker	18 23	Contract
East of Beiseker to Drumheller	21 65	Contract
Vermilion to Blackfoot	29 89	Day Labour
Minburn to Stony Creek	12 43	Day Labour
TOTAL	194 97	

By Contract 69 69 Miles By Day Labour 125 28 Miles

SECONDARY HIGHWAYS

Location	Miles	Work done by
Okotoks to Black Diamond	2.90	Contract
Jet Hwy No 9 to Carbon	7.25	Contract
Olds to Sundre	24.18	Contract
Whitemud River to South of Dixonville	2.63	Day Labour
Sangudo to East of Sangudo	3.52	Day Labour
TOTAL	40.48	

By Contract 34.33 Miles By Day Labour 6.15 Miles

GRAVELLING SUMMARY

	Main Highway	Secondary Highway	Miscellaneous	Totals
First Course Graveling	203.44	134.01	8.87	351.32
Replacement Graveling	194.97	40.48		235.45
TOTALS	398.41	179.49	8.87	586.77
By Contract	173.61	77.09	1.60	252.33
By Day Labour	224.77	102.40	7.27	334.44
TOTALS	398.41	179.49	8.87	586.77

STABILIZED BASE COURSE--MAIN HIGHWAYS

Location	Miles	Type	Work done by
West of Cochrane to Banff Park	28.17	Road Mix Stabilized	Contract
Calgary to High River	17.41	Road Mix Stabilized	Contract
Crossfield to Carstairs	9.95	Road Mix Stabilized	Contract
Carstairs to Olds	16.05	Road Mix Stabilized	Contract
Olds to Innisfail	9.30	Road Mix Stabilized	Day Labour
Innisfail to Red Deer	19.13	Waterproofed Mech Stabilized	Day Labour
TOTAL	100.31		

By Day Labour 28.73 Miles By Contract 71.58 Miles
Waterproofed 19.13 Miles Road Mix 80.88 Miles

ASPHALTIC SURFACING--MAIN HIGHWAYS

Location	Miles	Type	Work done by
West of Cochrane to Banff Park	44.10	2" Hot Plant Mix Surface Course	Contract
Calgary to High River	31.37	2" Hot Plant Mix Surface Course	Contract
Olds to Innisfail	9.30	2" Hot Plant Mix Surface Course	Day Labour
Crossfield to Olds	19.78	2" Hot Plant Mix Surface Course	Contract
Innisfail to Red Deer	19.43	Surface Treatment	Day Labour
West of Cochrane to Banff Park	44.10	Seal Coat	Contract
Calgary to High River	31.37	Seal Coat	Contract
TOTAL	205.15		

By Contract (2" Hot Plant Mix Surface Course)	98.25 Miles
By Day Labour (2" Hot Plant Mix Surface Course)	9.30 "
By Day Labour (Surface Treatment)	19.43 "
By Contract (Seal Coat)	78.47 "
2" Hot Plant Mix Surface Course	107.55 "
Surface Treatment	19.43 "
Seal Coat	78.47 "

ASPHALTIC SURFACING SUMMARY

Asphalt Used (including waterproofing in Stabilized Base Course)	2,335,383 Gallons
Aggregate used	6,283 Cu Yards
Plant Mix Surfacing Material	175,609 84 Tons.
Sand Seal Coat Material	5,245 Cu Yards
Area	1,739,352.5 Sq Yards.

TOTAL GRAVEL QUANTITIES TAKEN OUT UNDER ALL PROJECTS

	Day Labour	By Contracts	Total Cubic Yards
Pit Run Gravel to Trucks	111,364.5	13,612	124,976.5
Pit Run Gravel to Stockpile	38,693.5		38,693.5
Crushed Gravel to Trucks	259,831	434,507	694,338
Crushed Gravel to Railway Cars	12,560		12,560
Crushed Gravel to Stockpile	52,896	225,145	278,041
Crushed Gravel from Stockpile to Trucks	26,477.5		26,477.5
TOTAL CUBIC YARDS	501,822.5	673,264	1,175,086.5

DEPARTMENT OF PUBLIC WORKS

MAIN HIGHWAYS CONSTRUCTION
STATEMENT OF EXPENDITURE APRIL 1, 1946 TO MARCH 31, 1947

Project No.	Description	Total	Engineer- ing	Grading	Culverts and Cable Guard	Fencing
1B1	Brooks to Bassano..	\$ 42,103 17	\$ 1,912 88	\$ 40,165 29	..	..
1B3	N.E. 12-24-23-4 to Calgary..	37,291 82	1,796 42	..	..	..
1C1	Calgary to Radnor ..	209,365 87	22,873 25	97,849 75	\$ 18,739 68	\$10,591.52
1C2	Radnor to Banff ..	428,376 80	10,616 28	4,900 58	779 78	..
2A1	Carway to Carstairs ..	60 03	..	..	..	..
2A2	Macleod to Cardston ..	102,473 34	14,930 60	50,381 96	13,777 32	878 05
2B2	Staveloy to High River ..	245 52	178 85	..	..	..
2B3	Calgary to High River ..	302,140 65	6,299 71	..	48 28	..
2C1	Calgary to Carstairs ..	181,139 79	4,115 40	..	2,956 80	..
2C2	Carstairs to Bowden ..	316,395 00	9,480 26	..	..	..
2C3	Bowden to Red Deer ..	407,268 36	7,190 97	141 61	..	..
2D1	Red Deer to Ponoka ..	7,405 95	7,320 95	..	..	..
2D3	Millet to Edmonton ..	31,966 05	1,167 61	57 75	238 30	..
2E1	Edmonton to Legal ..	3,942 26	2,892 90	..	..	..
2E2	Legal to Clyde Corner ..	3,140 90	3,140 90	..	..	..
2F2	Smith to Slave Lake ..	671 10	..	671 10	..	..
2G1	Kinuso to Arcadia ..	10,050 55	405 71	549 45	..	..
2G2	Arcadia to Jct. Highway No. 34 ..	19,541 00	..	30 00	..	..
2G3	Jct. Highway No. 34 to Donnelly ..	15,099 69	368 09	28 50	..	..
2G4	Donnelly to Peace River ..	10,174 51	191 77	114 43	..	..
2H2	6th Meridian to Dunvegan ..	2,480 41	135 93	..	..	..
2J1	Dunvegan to Woking ..	23,345 89	1,993 18	12,774 62	4,237 85	..
2J2	Woking to Grande Prairie ..	27,852 40	4,305 41	1,205 16	552 80	..
2K1	Grande Prairie to Beaverlodge ..	13,508 13	258 00	..	..	..
3A2	Bow Island to Taber ..	1,804 61	1,765 24	..	..	..
3A3	Lethbridge to Taber ..	472 94	56 92	416 02	..	..
3B1	Lethbridge to Macleod ..	13,413 88	116 14	9,789.81	..	..
3B2	Junction Highway No. 2 to Macleod ..	622 43	622 43	..	..	..
4A1	Lethbridge to Mile 35.39 ..	248,114 22	17,572.52	126,683.12	14,767 90	783 35
4A2	Mile 35.39 to Coutis ..	75,427 12	2,890 26	10,328 17	206 63	3 80
5A1	Lethbridge to Cardston ..	12,700 84	1,217.11	8,454 03	..	..
6A	Pincher to Waterton Lakes Park ..	28 45	..	..	..	..
7A	Okotoks to N.E. 17-18-2-3 ..	817 00	..	..	..	..
9A1	Inverlake to Beiseker ..	27,371 69	1,291 52	..	..	..
9A2	Beiseker to Drumheller ..	36,697 50	1,703 02	..	..	..
11A	Red Deer to Rocky Mountain House ..	62 00	..	..	62.00	..
11B	Rocky Mountain House to Brazeau ..	1,979 60	..	71 00	..	..
12C1	Stettler to Lacombe ..	81,801 65	8,576 36	56,646 75	7,301 00	152 42
13A	Alberta Saskatchewan Boundary to Hughenden ..	117,845 77	8,816 15	71,706 26	7,252 06	38.83
13B1	Hughenden to Sedgewick ..	25 00	..	..	..	..
13B3	Daysland to Camrose ..	100.00	..	100 00	..	..
13B4	Camrose to Wetaskiwin ..	4,795 89	4,795 89	..	..	..
15A1	Edmonton to Fort Saskatchewan ..	19,163 38	1,032 57	8,214 97	4,180 27	..
16A1	Lloydminster to Vermilion ..	22,716 54	1,013 90	..	..	..
16A2	Vermilion to Innisfree ..	119,255 61	12,245 08	60,269 59	8,395 64	3,504 36
16A3	Innisfree to Vegreville ..	26,744 99	2,679 30	15,963 49	2,778 09	1,146 63
16B2	Edmonton to Chipman Corner ..	906 41	906 36	..	..	..
18A2	Clyde Corner to Fort Assiniboine ..	4,181 32	4,105 56	..	..	..
19A	Wetaskiwin to Winfield ..	15,618 50	3,634 46	11,984 04	..	..
23A1	Monarch to Champion ..	1,292 58	1,292 58	..	..	..
25A	Lethbridge to Iron Springs ..	1,468 11	1,468 11	..	..	..
27A	Olds to Sundre ..	22,818 87	1,956 01	..	..	..
28A2	Opal to Waskateneau ..	50 40	..	..	..	..
28B1	Waskateneau to Vilna ..	130.75	..	..	..	10 00
28B2	Vilna to St. Paul ..	75 56	..	..	..	..
34A2	Valleyview to 6th Meridian ..	134,546 53	8,867 80	68,287.76	15,241 24	40 00
34A3	6th Meridian to Grande Prairie ..	66,487.97	2,053 28	14,626 78	4,979 55	..
35A1	Grimshaw to Dixonville ..	1,982 12	42 45	..	..	..
35A2	Dixonville to South of Meikle River ..	51,841 59	1,570 72	10,118.06	667.20	..
35B	Meikle River to North Provincial Boundary ..	493 18	..	..	..	..
36A1	Killam to Viking ..	1,606 85	1,606 85	..	..	..
36A2	Killam to Castor ..	32,348 38	1,747 93	..	..	..
36A3	Castor to Hanna ..	50 00	..	..	..	..
39A2	Thorsby to Breton ..	82,251 46	9,410 33	53,782 68	12,625 69	44 20
39A3	Breton South ..	1,208 82	1,208 82	..	..	..
42A	Penhold to Lousana ..	95,033 25	9,160 34	80,616 01	1,578 03	..
43A2	Sangudo to Whitecourt ..	14,718 44	3,304 19	16 41	172 90	..
44A	Westlock to Smith ..	87,523 60	12,702 09	59,812 33	6,920 77	50 50
45	Two Hills to Andrew ..	70,232 60	7,899 50	36,656 13	10,145 60	895 35
46A	Lac La Biche to Boyle ..	109,983 72	5,439 37	64,738 30	13,397 79	525 60
47	Bickerdike to Mountain Park ..	79,543 21	8,636 89	43,673 53	408 65	..
40 00E23	City of Medicine Hat ..	1,283 40	..	..	..	..
40 00E28	City of Red Deer ..	147 90	..	..	..	..
40 00E35	Town of Okotoks ..	1,625 73	..	..	..	..
40 00E42	City of Drumheller ..	136 03	..	..	..	..
40 00E43	City of Wetaskiwin ..	213 30	..	..	..	..
40 00E44	Town of High River ..	2,255 13	..	..	..	..
40 00E47	City of Lethbridge ..	853 50	..	..	..	..
40 00E60	Village of Innisfree ..	943 62	7 00	590 37	30 44	..
40 00E61	Village of Irricana ..	147 98	..	..	..	..
40 00E71	City of Edmonton ..	4,138 50	..	..	..	..
40 00E72	City of Calgary ..	6,580.86	211.26	3,762 00	..	..
40 00E88	Town of Olds ..	353 52	..	..	..	..
40 00E91	Town of Peace River ..	9 46	8 25	..	..	..
3077	Rentals—Pit Sidings—Gravel Pits ..	3,373 14	21 94	..	..	..
3083	General and Administration ..	90,677.29	280.13	10,382 67	44 70	..
		4,057,138 90	\$255,540 1.51	\$1,036,695 68	\$152,486 96	\$18,755 21

SUMMARY

Appropriation 751A .. \$ 78,500 72
 Appropriation 751B .. 3,978,518 18
\$4,057,138 90

Compensation	Moving Poles	Gravel Surfacing	Stabilized Base Course	Seal Coat	Prime or Tack Coat	Asphaltic Surface Course	Clay Surfacing	Miscellaneous	Grants to Incorporated Areas
\$ 25 00									
1,744 58	\$1,472.64		\$ 35,415.72			\$ 79.68			
139 31			39,552 60			16,541 65			
60 03			197,270 67	\$ 9,726 31	\$ 8,883 94	194,708.96	\$1,330 97		
3,937 00		\$18,568 01							
			66.67						
			136,334 44	15,486 99		203,971 23			
60 00			125,547 27			48,460.32			
261 25			214,603 96			92,049 53			
85.00			334,925 45	1,647 50	315 38	63,047.45			
1,000 00		91 68	245 40			30,165 31			
		49 36							
		9,095 39							
		19,511.00							
50 00		14,703.10							
		9,818.31							
	37 00	2,344.48							
		4,303 24							
		21,789 03							
39 37		13,250 13							
1,605.00		1,902 93							
18,644 71	4,727 46	55,803 31	9,052 17			79.68			
13,151 94		16,589 20	32,177 44			79.68			
		3,029 70							
		817 00							
		26,080.17							
		34,994 48							
1,413.00		494 70							
3,752 10	365 05	5,007 07							
1,749 80	378 32	18,084 78					9,819.57		
2,268 87		3,466 70							
		21,702 64							
2,805 74	274 50	21,907 42					9,763 28		
105 41		4,072 07							
		3 05							
		75 76							
		20,862 86							
50 40									
120 75									
75 56									
		42,109 73							
		44,828 36							
		1,939 67							
		39,485 61							
493 18									
1,025 75		29,574 70							
50 00									
4,072.16	337 24	1,979 16							
2,315 40	1,363 47								
2,078 54		9,146 40							
7,746 55	92 00	99 36							
1,745 65		12,890 37							
15 00		25,099 56							
		26,826 14					768 10		
			556.03			1,069.70			\$1,283.40
									147 90
									136 05
					214 45	2,040 68			213.30
		315 61							853 30
		147 98							
									4,138 50
		353 52							2,607 60
		1 21							
2,250 75		1,100 45							
		91 60			1,571 90				
\$74,938 70	\$ 9,048 58	\$584,107.00	\$1,125,747 82	\$26,860 80	\$10,985.67	\$652,293.87	\$21,681 92	\$78,306 29	\$ 9,380 25

NOTE Reconstruction Work in the sum of \$30,713 49 was also undertaken by the Branch Payment for same was made from Appropriation 706BH and is included in Statement for Main Highways Maintenance and District and Local Roads.

NOTE The above figures include Special Appropriation 754BS, but do not include Post War Reconstruction O C. 784-1945/1946.

SURVEYS BRANCH

Report for the Fiscal Year ended March 31, 1947

(A. P. C. BELYEA, *Director of Surveys*)

During the year, four field parties were employed from the first week in May until the 1st of November on survey of main highways, new roads, road diversions and miscellaneous surveys.

The following is a summary of the work of this Branch during the past year:

Surveys required and brought forward from 1945 (after revising schedule)	155
Surveys asked for during 1946	141
Surveys made during 1946	52
Surveys carried over to 1947	244
Plans submitted and examined on behalf of Municipal Districts	73
Titles issued to roadways surveyed by Municipal Districts	64
Plans prepared and filed in Land Titles Office	252
Certificates of Title received for roadways	120
Certificates of Title received for lands given for public purposes under Departmental regulations as to subdivisions	17
Certificates of Title to public buildings	17
Transfers issued covering lands no longer required	276
Number of plans of subdivisions approved	243
Plans submitted by Department of Water Resources	19
Plans of Power and Transmission Lines	99
Vouchers issued for compensation	529
Leases of road allowances in force	449
New leases of road allowances issued	63
Leases of Public Works Reserves issued	15

Location of highways, roads, road diversions, telephone right-of-way, and miscellaneous areas surveyed:

MAIN HIGHWAYS

	Twp	Rge	Mer.
Calgary-Edmonton	30	1	5
Lethbridge-Coutts	6 to 8	19 to 21	4
Macleod-Standoff	6 to 8	25 and 26	4
Calgary-Cochrane	24 to 26	1 to 3	5
Bickerdike-Coalspur	49 to 53	18 to 21	5
Innisfree-Minburn	50 and 51	10 and 11	4
Westlock-Dapp	60 to 62	26 and 27	4
Vermilion-Stony Creek	50	7 and 8	4
Oliver-Fort Saskatchewan	54	23	4
Thorsby-Breton	48 and 49	1 to 4	5
Willingdon-Andrew	56 and 57	15 and 16	4
Red Deer-Blackfalds	38 and 39	27	4
Penhold-Lousana	36 and 37	23 to 27	4
Alix-Stettler	38 and 39	19 to 23	4
Killam-Viking	44-47	13	4

ROAD SURVEYS

I D 's and M D 's	Section	Twp	Rge	Mer
I D 65	6 and 7	39	5	5
I D 76	2	45	2	5
I D 76	3	45	1	5
I D 76	3	46	1	5
I D 76	16, 17, 33 and 34	46	1	5
M D 75	4, 5, 8, 17 and 18	48	5	5
M D 75	23, 24, 26, 27 and 34	43	6	5
M D 66	31 and 36	44	1 and 2	5
M D 54	6	39	20	4

MISCELLANEOUS

I D 's and M D 's	Section	Twp	Rge.	Mer	
M D 16	23 and 32	6	25	4	Gravel Pit
M.D. 94	27	53	9	5	Public Reserve-- Wildwood
I D 65	22	39	7	5	Road Revision
I D 107	16	64	1	5	Posting Survey
I D 107	16 and 21	65	1	5	Damage Claim
I D 81		54 and 55	12	4	Referencing Monuments

Plans of two new Indian Reserves, Sunchild I.R. No. 202 and O'Chiese I.R. No. 203 were compiled for the Indian Affairs Department from surveys made by a land surveyor during the previous season. These Reserves lie in the unsubdivided area north-west of Rocky Mountain House, the total area of the lands comprising the two Indian Reserves being 47,181 acres.

At the request of the Department of Lands and Mines a survey was made of the accrued areas resulting from the recession of the shore-line of Beaverhill Lake during recent years. This survey was carried out by Mr. J. W. Doze, A.L.S., and will result in an area of approximately 19,800 acres being made available for settlement adjacent to the receded shore-line.

A new map of the Province of Alberta on a scale of twelve miles to the inch was completed and printed during 1946 and these maps have now been made available for public distribution.

THE TOWN AND RURAL PLANNING ADVISORY BOARD
For the Year Ended March 31st, 1947

No formal meetings of the Town Planning Board were held during the year, as no problems on general policy arose, but a number of individual cases were dealt with informally by consultation between the Director of Town Planning and the other Board members and action in regard to them was taken by the Director accordingly.

On account of greatly increased building activity throughout the Province, the work of the Town Planning Branch has increased correspondingly. The greater part of this work consisted of the examination, prior to approval, of plans of new subdivisions of land which have been made to meet the current demands for building sites. As an indication of the increase in number of such plans the following figures showing the number of plans dealt with in recent years are revealing:

Jan 1st to Dec 31st, 1936	38 plans
Jan 1st to Dec 31st, 1940	49 plans
Jan 1st, 1941 to Mar 31st, 1942	44 plans
Apr 1st, 1942 to Mar 31st, 1943	59 plans
Apr 1st, 1943 to Mar 31st, 1944	107 plans
Apr 1st, 1944 to Mar 31st, 1945	109 plans
Apr 1st, 1945 to Mar 31st, 1946	191 plans
Apr 1st, 1946 to Mar 31st, 1947	244 plans

The Town Planning Office has also received a large number of requests for advice and assistance from various towns and municipalities in connection with the preparation of development plans and the drafting of suitable zoning by-laws. Staff shortages have made it impossible to comply fully with all these requests, but as there are no private town planning consultants available for this type of work in Alberta, as much help as possible has been given to those municipalities which have requested it.

During the course of the year, new zoning by-laws for the Town of Brooks and the Village of Viking were examined and became effective. The following amendments of existing by-laws were also approved and passed: City of Calgary, 11 Amending By-laws; City of Edmonton, 4 Amending By-laws, and one Amending By-law each for the Cities of Lethbridge and Red Deer, and Towns of High River and Grande Prairie and the Village of Holden. A by-law appointing a Town Planning Commission for the Town of Brooks and by-laws setting up a Regional Planning Commission for the Red Deer locality on behalf of the City of Red Deer, the Village of North Red Deer and the Municipal District of Red Deer were also approved and passed.

The Red Deer Regional Commission has been active since its formation and with the help of technical advice provided by the Provincial Town Planning Branch has prepared a 30-year plan of development for the city and surrounding areas which will shortly be submitted to the councils concerned.

During the year, 18 transfers of land were submitted for approval under the provisions of Section 35 of The Town Planning Act. Approval was refused in 5 cases and granted in 13 cases.

In contrast with the preceding year when no such applications were received, 14 applications for the approval of proposed tourist camps were dealt with. In some cases, modifications in the lay-out of these sites or in their approaches from the highway were required but all were finally approved.

During the year, a number of reports were received regarding unauthorized signs and billboards erected on land adjoining provincial highways. Action was taken to have these removed and in view of the apparent increased tendency throughout the province to adopt this type of unauthorized advertising, district engineers have received instructions to make a complete inspection and report on unlicensed signboards in their respective territories.

A. P. C. BELYEA,
Executive Secretary and Director of Town Planning.

BUILDINGS BRANCH

Report for the Fiscal Year ending March 31, 1947

(W. D. STACEY, *Superintendent of Buildings*)

The general repair and maintenance of all public buildings and institutions have been carried on by this Branch similar to previous years, to keep up the standard. Several buildings were erected and work was performed by day labour and contract under the supervision of our foremen and directed from this office.

Following is a list of the projects:

Brooks:

At the Demonstration Farm, an implement shed was built. A building was purchased and remodelled to accommodate government offices.

Calgary:

At the Institute of Technology, Hut Number 33 was remodelled. In the Provincial Building, double vaults were installed.

Camrose:

The Normal School Buildings were remodelled into an Auxiliary Home for the Aged Mentally Incompetent.

Clareholm:

A new root cellar was constructed at the Provincial Auxiliary Hospital.

Edmonton:

A building was purchased in Edmonton South to accommodate Government Departments.

Property was purchased adjacent to our Storage and Repair Shop, South Edmonton.

Fort Saskatchewan:

At the Provincial Jail a new 16-ft. high concrete wall was built across the Women's Jail Yard.

Steam heated garden frames were constructed.

Lacombe:

A building was purchased to accommodate Government Offices.

Lethbridge:

The Canadian Pacific Railway exchanged the A. R. & I. Building for the Public Works Building.

Olds:

At the Agricultural School, an implement shed, cattle shed, two granaries, and greenhouse were constructed, also the horse barn was remodelled.

A new well was drilled.

Oliver.

At the Poultry Farm, two new brooder houses and two range houses were constructed.

At the Farm, a cow barn and an implement shed were constructed.

Construction was commenced on the unit for Mental Defectives.

Rocky Mountain House:

A garage and storage building was constructed.

St. Paul:

The second story of the Provincial Building was completed.

Vermilion:

At the Agricultural School the lecture hall was remodelled into three residences.

Sewer and water was brought to the property from the Town of Vermilion.

Police Buildings:

General repairs and alterations were made at a number of the Government-owned buildings, occupied by the R.C.M.P.

Treasury Branches:

A building was purchased and remodelled at Barrhead

Property was purchased and buildings constructed at Killam, Mayerthorpe and Rycroft

Property was purchased in the Town of Vulcan

Post-War Reconstruction:

The construction of the Nurses' Home at the University Hospital was continued.

Architectural Branch:

All plans and specifications for our work were prepared by this branch, also plans, specifications and general supervision of the Buildings Branch, Department of Education.

Carpenter Shop:

This branch has been busy manufacturing furnishings and equipment, also sash and doors for the various buildings throughout the Province

BUILDINGS AND MAINTENANCE BRANCH—EXPENDITURE FOR 1946-47

CAPITAL EXPENDITURE

756	Furnishings and Equipment, Legislative and Departmental Buildings and Public Institutions including S W 19 and 21	\$184,493 58
759	Site and Construction, including S W 13, 17, 21, 36, 45, 52	182,095 24
		\$666,588 82

INCOME EXPENDITURE

708	Administration	\$ 30,715 27
709	Legislative and Departmental Buildings	693,329 30
710	Public Institutions	90,970 64
713	Government House	4,456 20
		\$819,477 41

MECHANICAL BRANCH

Report for the Fiscal Year ended March 31, 1947

(VERNON PEARSON, *Superintendent*)

This report deals with the activities of the following sub-divisions of the Mechanical Branch for 1946-47:

1. The maintenance and operation of power plants and utility services of the eight largest institutions
2. The administration of The Steam Boilers Act
3. The administration of The Factories Act.
4. The administration of The Welding Act.
5. The administration of The Electrical Protection Act.

Power Plants and Institution Maintenance

The situation with regard to the supply of material required for the proper maintenance of the Power Plants and the various utility services at the Institutions is far from satisfactory. This is particularly true with regard to the supply of repair parts for electrical equipment.

Examination of the Power Plant statistics will show that there was a small increase in the services supplied to the Institutions with a considerable increase in cost.

During the year, the work of rehabilitating the Institute of Technology in Calgary was completed. All the equipment which was removed in 1940 to accommodate the R.C.A.F. was returned to use and in addition large additions were made to the welding shop and the machine shops.

The 1946-47 estimates contained an appropriation for the construction of a large water reservoir at the Oliver Mental Institute. Nearly all materials required for this job were purchased and placed on the ground but this was accomplished late in the season and due to the shortage of skilled workmen the job was not proceeded with. It is hoped to have this work completed in 1947.

A new 80 kilowatt engine generator set was ordered from England for Fort Saskatchewan Gaol. This equipment was promised for February delivery, it had however not arrived by March 31st.

PROVINCIAL GOVERNMENT POWER PLANT STATISTICS
For Year ended March 31, 1947
(Vernon Pearson, Mechanical Superintendent)

No.	Name	Steam Purchased (Pounds)	FUEL		Gas (Cubic Feet)	WATER		ELECTRICITY		Mechanical Refrigeration Tons	Expenditure for Maintenance and Operation
			Coal (Tons)			Pumped from Local Sources Imperial	Purchased Gallons	Generated	Purchased		
1	Parliament Buildings and Administration Building, Edmonton		4,546				14,528,000	710,800	558,400		\$ 40,073.16
2	Institute of Technology, Calgary		150		22,517,000		21,944,432	105,500	66,400		17,017.63
3	Ponoka Mental Hospital		14,819			58,106,000		1,505,300		5,385	111,843.45
4	Fort Saskatchewan Gaol		3,206			10,160,000		215,465		350	27,679.20
5	Lethbridge Gaol		3,127			1,061,083		127,686			21,205.50
6	Oliver Mental Institute		9,531				7,555,365	1,183,700			86,588.14
7	Central Alberta Sanatorium, Calgary				49,400,000	18,741,400	44,500,000	354,350	33,280	1,200	33,025.00
8	Provincial Training School, Red Deer		2,893				13,027,300	96,695			26,100.85
Totals			38,272		71,817,000	88,068,483	101,555,097	4,299,696	658,080	6,935	\$ 363,532.93

Total Coal used

Total Gas used

Total Water used

Total Electricity used

Total Refrigeration

Total Steam purchased

Total Coal used

Total Gas used

Total Water used

Total Electricity used

Total Refrigeration

Total Steam purchased

38,272 Tons

71,817,000 Cubic Feet

180,623,900 Imperial Gallons

4,957,779 Kilowatt Hours

6,935 Tons

Nil

THE BOILERS ACT

We are pleased to report that there were no fatalities or serious accidents, due to the failure of any Pressure Vessel during the year.

John McPhail, Master Mechanic at West Canadian Collieries was fatally injured at Blairmore when the tender of a locomotive struck him, knocking him down between the rails. Both legs were severed below the knees and he was rolled under the tender and engine for a distance of seventy-five feet, before the locomotive was brought to a stop. The deceased was about sixty-nine years of age and partially deaf, which no doubt accounts for him failing to hear the approaching locomotive. At the inquest the coroner's jury brought in a verdict of accidental death.

Five men were injured in a gas explosion which took place in the engine room of the Dominion Glass Company's Plant, Redcliff. One man, A. Collard, died later as a result of the accident. The explosion occurred while a gas line was being blown out with high pressure gas which was ignited by an open flame. The coroner's jury declared A. Collard was responsible for the accident. Comparatively little damage was done to the electrical machinery in the room.

J. L. McCallum, shift engineer at the Alberta Clay Products Co. Ltd., Medicine Hat, dropped dead from a heart attack just after taking over his shift. Fortunately for the safety of the plant, the engineer who had been relieved had not left the plant, and he assumed deceased's shift.

Arthur Ray was severely scalded while working at the rear of the boilers at Etter-McDougall Sawmills, west of Winfield. He was caught by the water being discharged from the water column drain when the fireman was blowing out the water column. The engineer had failed to notify the fireman where he intended working, and the fireman was obeying instructions in checking the water column. Due to the confined space at the rear of the boiler, the engineer was unable to evade the stream of boiling water, consequently his face, arms, hands and back were scalded. Following the accident the drain discharge piping was changed to a location recommended by the District Inspector.

Two boilers in the Jasper Park Lodge Power Plant were condemned and have been replaced by two second-hand boilers from Dunblane, Saskatchewan.

The three boilers in the Sentinel Steam Station of the East Kootenay Power company, which have caused considerable concern in recent years due to the action of caustic embrittlement, have been replaced by two 90,000 lbs. per hour steam generators, designed for using oil or pulverized coal as fuel.

A new quick freezing plant has been installed at the Broder Canning Company's Lethbridge Plant to replace the original refrigeration plant which could not produce the refrigeration required by modern canning methods.

The Husky Refining Company is erecting a new refinery at Lloydminster and expect to have it in operation in the near future.

A 250 H.P. Union Universal boiler, a type new to this Province, was installed at Foothills Collieries, contrary to the advice of the Boiler Inspection Branch. During a trial period of several weeks, supervised by the designer and the chief engineer of the manufacturer, faulty circulation caused considerable trouble and prohibited the use of the boiler; the boiler was taken out and returned to the manufacturer. It was replaced by a horizontal return tubular boiler, 84 inches diameter, 20 feet long, which has given entire satisfaction since it was placed in service.

The last of the old boilers in the City of Edmonton Power Plant has been discarded, and foundations are being prepared for two 155,000 lbs per hour steam generators and one 30,000 K.W. turbo alternator.

Several cast iron sectional boilers were so badly cracked due to low water that they were condemned and replaced by steel heating boilers. Some of these boilers were equipped with low water fuel cut-offs which failed to function when required, owing to the accumulation of scale and sediment in the float chamber.

A number of power boilers in the oil fields were damaged due to low water and being operated in a dirty condition, but the majority were repaired and returned to service.

Safety measures adopted by the tank farm operators in the Turner Valley area have kept accidents to a minimum and it is a pleasure to report the absence of serious accidents in that particular phase of the oil industry.

It was not necessary to undertake any prosecutions for illegal operation under The Boilers Act, which fact supports the statements of the District Inspectors that they are receiving splendid co-operation from pressure vessel owners and operators.

Inspector Fraser McLeod of Calgary, passed away in his sleep, May 17th, 1946. He was a very competent and reliable inspector, and was highly respected by power plant owners, oil refinery operators and engineers, as well as the entire personnel of the Mechanical Branch.

Inspector C. Marsh and Assistant Inspector D. J. Brenton resigned from the staff.

Inspector W. F. Henry had the misfortune to fall and injure his left shoulder while inspecting a boiler at the old McGavin Bakery in Lethbridge. This accident prevented him from making inspections of pressure vessels which necessitated internal examination by way of a manhole, but he was able to attend to his office work and engineer's examinations.

At the invitation of the Executive Committee of the National Board of Boiler and Pressure Vessel Inspectors, Assistant Chief Inspector Scott attended their Sixteenth General Meeting, one Executive Meeting and several committee meetings. These meetings were held in Montreal on June 25th, 26th and 27th, 1946. This was the first General Meeting held outside of the United States and considerably increased the influence of the Canadian members in the policy of the National Board. The main topics discussed were those

relating to shop inspections and the uniform recognition of examinations for National Board Certificates. Other items discussed included welded stays in power boilers, package boilers and inspection of pressure vessels when mass produced. All expenses incurred in attending this General Meeting were defrayed by the National Board.

The Canadian Steel Boiler Institute arranged a joint conference of Chief Boiler Inspectors of the various Provinces and Insurance Companies and the members of their Institute, for the purpose of discussing uniform interpretation and application of the pressure vessel construction code regarding vessels fabricated and installed in Canada. This conference was held in Winnipeg on January 20th and 21st, 1947, and Alberta was represented by Mechanical Superintendent, Vernon Pearson, and Assistant Chief Inspector R. Scott.

It was agreed that the Executive of the Canadian Steel Boiler Institute would endeavour to arrange with the Canadian Standards Association to establish a Central Survey Bureau. Designs of steel boilers would be sent to this bureau for survey before submitting them to the various Provinces for registration. This procedure, if followed, would eliminate a great deal of unnecessary correspondence which is now necessary when designs are submitted directly to the individual Provinces for approval.

The Alberta Gas Services Limited have commenced installing domestic equipment for using Propane, a liquified petroleum gas, in the Southern part of the Province. Our Regulations do not cover vessels used for storing Propane, but, complying with the request of the Alberta Gas Services Limited, the receiver manufacturers are submitting their designs for our survey and registration. Two sizes, 108 inches diameter, 64½ feet long and 103 inches diameter, 71 feet long have already been approved and registered.

The following is a summary of work accomplished during the year, along with a comparative summary of work and revenue for the years 1945-46 and 1946-47.

SUMMARY OF WORK AND REVENUE, 1946/47 AND 1945/46			
Type of Boiler or Pressure Vessel Inspected	1946/47	1945/46	
Horizontal Return Tubular	350	336	
Horizontal Furnace	31	28	
Water Tube	214	173	
Locomotive Type	762	751	
Vertical	150	135	
Air Receivers	2362	2252	
Heat Exchangers	94	119	
Oil Stills		5	
Steam Processors	98	83	
Steel Heating	567	481	
Cast Iron	502	545	
Miscellaneous	343	459	
TOTAL	5505	5367	
Condition of Pressure Vessels Inspected			
Good	3509	3483	
Fair	1866	1773	
Poor	106	97	
Condemned	18	10	
Scrapped	6	4	
TOTAL	5505	5367	

Certificates Issued	4629	4486
Number of Inspection Visits	6687	6610
Number of Special Inspections under Section 14 of The Alberta Boilers Act	72	59
Factory Act Inspections	635	626
Number and Class of Engineer's Certificates Issued		
First Class	2	2
Second Class, 750 H.P.	7	1
Second Class, 500 H.P.	18	16
Third Class	72	51
Special	6	12
Traction Final	7	7
Fireman's Final	42	20
Provisional	346	420
Temporary	337	458
Welder's Certificates	10	19
TOTAL	847	1006
Number of Designs Surveyed	204	152
Revenue: Surveying and Registering Designs	\$ 1,688 50	\$ 1,082 00
Pressure Vessel Registrations	40,152 00	39,961 45
Engineers' Registrations	2,217 00	2,275 00
Engineers' Certificates	4,179 50	4,566 50
Special Inspection Fees	1,304 14	890 17
TOTAL	\$ 49,541 14	\$ 48,775 12

THE FACTORIES ACT

During 1946, there was a considerable growth in industry within the province. A large number of new places of business were opened and new factories were erected, resulting in an increase in employment in those industries which come within the scope of The Factories Act.

While the production of crude oil decreased during the past year, the search for oil continued on as large a scale as the previous year. Batteries of tanks for storing crude oil at oil wells usually referred to as "tank farms" are now "factories" listed in schedule "A" of The Factories Act. Most of these premises have been inspected during the year, and in some instances recommendations have been made to eliminate hazards found to be existing.

The manufacturing of flour and by-products of wheat has continued to increase. The production of sugar in the Lethbridge district was hampered by adverse weather conditions in the fall, which prevented the full harvesting of the sugar beet crop. During the year the Canadian Sugar Factories Ltd. commenced the erection of an additional factory in the Taber district. A larger amount of canned vegetable was packed in the province this year, than at any previous time. A new factory for the canning of vegetables was put into operation in the Brooks district.

Construction of houses and other building operations created a greater need for those building materials which are manufactured in the province, such as lumber and other wood products, brick, tile and cement. The erection of homes created demands for furniture and furnishings, thereby making for full employment in those factories manufacturing these products.

In the catering industry, employment again maintained a high level throughout the year. Many places of business have enlarged their premises, and many new businesses have started in the province.

Throughout the year copies of all inspectors' reports have been furnished to The Workmen's Compensation Board, and the Board

has notified this Branch of many accidents and the manner in which they occurred. This information is of considerable benefit to our inspectors in the course of their duties. Our inspectors on many occasions have made investigations as to the cause of accidents in order to prevent similar accidents occurring, both at the request of The Workmen's Compensation Board and employers.

INSPECTIONS

Inspectors again have devoted the greater part of their time to those centers where large factories and shops are situated, and where the greater number of employees were known to be employed.

Requests for special inspections have continued to come in from both employers and contractors when alterations to structures and changes to equipment were being made and when new buildings were being erected.

The cities of Medicine Hat and Lethbridge have no resident inspectors. These Cities received periodical visits from the inspectors resident in Edmonton and Calgary. Lethbridge received seven and Medicine Hat six. Periodically during the year, inspectors made inspections in those parts of the Province where oil wells were being drilled and where outlying factories are situated.

Table number one, sets forth the number and classification of inspections made, together with the number of male and female employees under each class and the number of safety recommendations made. Under the heading "SAFETY" recommendations were made relative to the guarding of machinery and shafting, hand rails and stairways, runways and platforms, openings in floors, condition of ladders and scaffolding, access to exits and fire escapes and good housekeeping.

TABLE NO 1
SUMMARY OF INSPECTIONS AND EMPLOYEES

	No of Inspections Made	No of Male Employees	No of Female Employees	Total No of Employees	No of Safety Recom- mendations
Factories	2213	22669	6340	29009	1024
Shops	1724	11200	8910	20110	104
Office Buildings	88	227	68	295	
TOTALS	4025	31096	15318	49414	1128

PASSENGER AND FREIGHT ELEVATORS

Twenty-four new elevators were installed during the year, classified as follows:

Five Passenger, fourteen Power Freight, two Humphrey and three Power Dumbwaiters

Seven hundred and seventy-eight elevator inspections were made and of these seventy-two were special or requested inspections. Twenty-one elevators were found "not in operation" at the time of inspection, and a total of seven hundred and two elevator inspection certificates were issued, from which the fees amount to \$2,785.00.

Table number two contains information relative to the number of elevator inspections made, classification of such elevators inspected, and the number of safety recommendations in each classification.

TABLE NO 2
SUMMARY OF ELEVATOR INSPECTIONS

Class of Elevators Inspected	No Insp.	No Rec.
Escalator	7	3
Passenger	203	221
Power Freight	384	519
Manually Operated Freight	47	55
Employee's Belt Lift or Humphrey	26	38
Power Dumbwaiter	39	34
Not Being Operated	21	13
Condemned	5	
Dismantled or Scrapped	3	
Reinspected		
Passenger	6	2
Freight	35	30
Manual	2	1
Humphrey	0	0
Dumbwaiter	0	0
TOTAL	778	916

During the year under review the Department was advised of twenty accidents occurring on elevators. This is a slight increase over the previous year when eighteen such accidents were reported.

The following is an analysis by causes of the total accidents reported and investigated:

Shear platform to threshold	5
Hand injuries in closing gates and doors	5
Caught in moving parts	6
Miscellaneous	4
TOTAL	20

The above accidents were caused by the following:

Unsafe conditions	2
Unsafe acts	13
Undetermined	5
TOTAL	20

THE WELDING ACT

During the year, the Welding Department examined 696 candidates for welder's certificates. Of these, 87 obtained Journeyman Certificates, 427 Special Certificates, 103 Temporary Certificates and 29 Provisional Certificates. The percentage of failures during the year was slightly higher than the preceeding year and is approximately 40%. Fifty candidates failed to secure a certificate of any kind. Many were given certificates of a lower grade than that for which they were examined. Three hundred and twenty-seven Apprentice Certificates were also issued.

The significant thing about the above figures, is that while only 87 or less than 13% of the candidates received Journeyman Certificates, three hundred and twenty Apprentice Certificates were issued. This is an indication of the growth of the Welding Industry. During the year an enormous amount of welding equipment was sold in the Province, some of which was sold to persons without welding certificates and in many cases to persons who possessed no skill in welding whatever. There are however, a very large number of persons engaged in this business in the Province, but only a small percentage can be regarded as competent tradesmen.

There were 59 prosecutions under The Welding Act, all of which resulted in convictions, 48 under Section (9) and 11 under Section (10). Eleven investigations were conducted by the R.C.M.P. which did not result in prosecutions.

Eight hundred and seventy-five (875) Shop Inspections were carried out by the inspectors as well as a large number of inspections which were repeat calls and did not necessitate completing regular Shop Reports.

Ten accidents to welders were reported during the year, seven of which caused injury to persons. One proved fatal.

THE ELECTRICAL PROTECTION ACT

Increased activities in all branches of the electrical industry continued during the year with demand for service and materials far exceeding supplies available.

Power companies report an increase of 11% in new customers and 15% in energy consumption during 1946. This increase did not in any way cover the many applications for new and increased electric power service.

Increases in the scale of current were general, the Calgary Power Company alone having increased their sales by 51,000,000 K.W.H. The City of Calgary's consumption increased 7,000,000 K.W.H. and the Canada Cement Plant at Exshaw increased their consumption by 4,000,000 K.W.H. Much of the increased consumption can be attributed to the marked trend toward the use of electric power in place of steam power in many industries, particularly grain handling and processing plants.

To provide for the increase in power loads, extensive additions to the generating capacity in the province is being made. The Calgary Power Company is constructing a new 15,000 KVA hydro plant at Barrier, which they hope to have in operation by June of 1947. The City of Edmonton are proceeding with the installation of a new 30,000 KVA unit and the City of Medicine Hat expect to have a new 10,000 KVA steam driven unit in operation before the end of 1947. The Canadian Utilities are building a new steam plant at Drumheller and expect to have a new 7500 KVA unit in operation this year. The Northland Utilities has increased the capacity of their plant at Peace River and plan to supply power between Peace River and Fairview on a new 23,000 volt transmission line.

Further additions were made to transmission and distribution lines during the year. Among these being a new 66 KV line from Edmonton to Tofield and new 13 KV lines from Delburne to Erskine and from Vegreville to Smoky Lake. The voltage was increased on a number of lines from 13 KV to 22 KV to supply increased loads.

In addition, rural electrification projects were carried out in the Lethbridge, Red Deer, Ponoka, Edmonton, Vegreville and Willingdon districts. Provision was also made to supply over 100 rural customers adjacent to existing transmission lines. A number of small plants were installed to supply hamlets and villages in districts not served by power company transmission lines, and additional capacity was added to many existing plants of this type.

New interior wiring installations and additions to existing installations kept electrical contractors and wiremen fully employed throughout the year. The demand for wiring materials far exceeded the supply in spite of an overall increase of 25% as compared to 1945. Strikes in Eastern factories caused critical shortage in many lines, particularly items in which steel, porcelain, or cotton, were used. With the shortage of material and skilled labour, it was found impossible in many places, particularly rural areas, to have new electrical installations completed. As a result, many of the new rural areas are unable to make full use of the electric power available.

Three fatal accidents occurred during the year. Two of these were at transformer sub-stations supplying coal mines, and in each case was caused by carelessness of the dangers involved in coming in contact with high tension lines. One fatal and one serious accident occurred when buildings were moved under power lines. This type of accident continues each year and is due to the failure of building movers to plan their route beforehand and their reluctance to notify the power companies when it becomes necessary to obtain increased clearance under power lines.

A serious accident occurred when a lineman engaged in maintenance work in the City of Calgary distribution lines and was caused by failure to observe safety rules combined with a mistake in operating procedure. Steps were taken to insure that safety rules will be more closely observed in the future.

Several other minor accidents were investigated, and, where necessary, requisitions were issued to eliminate unsafe conditions.

Extensive revision to The Electrical Protection Act regulations was proceeded with during the year, and meetings with power company and union representatives were held in June, 1946, and February, 1947. The proposed regulations cover many branches of the electrical industry for which no rules are provided at the present time. They also eliminate many of the arbitrary requirements now in force, and will permit the economical use of improved materials and methods and still retain reasonable safety factors. In general the proposed regulations met with the approval of the engineering staffs and union representatives. There is, however, some objection to the extent of the rules involved, but no specific objection has been made to any individual requirement.

Revisions to the Canadian Electrical Code, preparatory to publishing the 5th Edition, were discussed at a meeting held in Calgary in June, attended by representatives of the four western provinces. A further meeting was held in Toronto early in November, attended by representatives of all electrical inspection departments in Canada, when a final proof of the 5th Edition was approved. This Edition is now being printed and it is expected to be available for distribution by August, 1947.

Rules were also drawn up and printed in pamphlet form covering essential requirements for farm wiring. These rules were adopted by Order in Council 1210/46 and are being distributed free of charge to all interested parties.

The manufacture of electrical equipment and appliances increased tremendously during 1946, and the Canadian Standards

Association testing laboratories in Toronto are far behind with tests and approval of the many items submitted. Numerous electrical appliances and equipment were found during the year, which had not passed the safety tests. In each case, the sale was stopped until the required safety tests had been made. Many firms were unaware of provincial requirements and considerable educational work had to be done in this respect.

Two new inspectors were added to the staff in the year of 1946, one being placed in the Edmonton district and one in the Lethbridge district. This made it possible to carry out inspections in many parts of the province not formerly covered. However, the districts are so large and the electrical work so extensive, it is still impossible to cover the work thoroughly. Requests are continually received for inspections, particularly in the rural electrification areas which we find it impossible to make.

The following inspections were made, requisitions issued, and reports checked during the year:

New service reports from power companies	-1076	
C.S.A. Approval reports checked	-726	
Inspections which resulted in requisitions being issued		1366
Inspections and calls where requisitions were unnecessary		615
Total inspections and calls		1981

HIGHWAY TRAFFIC BOARD

(G. H. N. MONKMAN, *Chairman*; W. T. AIKEN, *Secretary*)

During the fiscal year ending March 31st, 1947, Bus operation throughout the Province continued to grow and a new high was reached in the territory served, the number of miles operated and the number of passengers carried. There was a marked improvement in standard of vehicles operated due to the ability of the operators to secure new equipment and it is hoped that this improvement will continue.

The Board dealt with a considerable number of applications for operation of new routes, extensions and transfers.

The Canadian Coachways was granted a license to extend the Edmonton to Athabasca operation from Athabasca north and west to the British Columbia boundary enroute to Dawson Creek, B.C. on condition that operation from High Prairie west would be with closed doors. At a later date arrangements were made by this company to take over the routes operated by Morrison & Sargent and E. A. Andersen, thus providing for a through operation from Edmonton to Dawson Creek. The Peace River Bus Lines was granted certificates to operate over the following routes, Spirit River to Grande Prairie and to McLennan, Spirit River to B.C. Boundary and Fairview to High Prairie. Branch Lines of Mountain Park were granted a certificate to operate from Mountain Park to Edson. Clark & Switzer for operation from Waterways to Fort McMurray, later transferred to Sandulac & Switzer. Pearson & Hagen to operate from Lethbridge to Ft. McMurray, later transferred to Oliver Hagen. Sorensen Bus Lines from Drumheller to Stettler via Big Valley transferred to Townsend Bus Lines. C. McBeth from Olds to Sundre transferred to C. H. Taylor. Monden Transportation a seasonal certificate between Calgary and Bragg Creek, Glenmore Cab Co. to serve the districts of Windsor Park, Glenmore and Manchester out of the City of Calgary. Riverdale Coal Co. a certificate to carry their employees from Edmonton to and from work at the Riverdale Coal Mine. The Board also authorized the extension of operations as follows, Sunburst Motor Coaches from Wainwright east to Chauvin, Reith Bus Lines from Rimbey to Winfield, Canadian Coachways to extend service on the Edmonton Breton line to take care of the districts of Genesee, Warburg and Berry Moor.

Transfers of certificates were granted as follows, Sorensen Bus Lines Ltd. operation from Calgary to Milo to Duthill operating under the name of Alberta Trailways, Carbon Bus Lines between Carbon and Central Service Station on Highway No. 9 from C. A. Cressman to D. A. Prowse, Edmonton to the Black Diamond Mine from Graf and Moore to C. Bradshaw now operating as Diamond Lines, Medicine Hat to Hilda from Lorenz Truck Service to John Knox; Hussar to Calgary from J. Smith to Gunnar Nielsen operating as the Nielson Bus Lines, Camrose to Alliance from Star Bus Lines to Sunburst Motor Coaches, Ponoka to The Provincial Mental

Hospital from L. C. Baisley to Allen & Wilson operating as Ponoka Bus Lines.

The following certificates issued during the year were in effect as at March 31, 1947.

Alberta Montana Bus Lines	Lethbridge-Goutts
Alberta Trailways	Calgary-Milo
Blue Goose Lines	Edmonton-Newbrook
Branch Lines Ltd	Mountain Park-Iusscar-Cadomin
	Mountain Park-Edson
Bus Universal Supply (of Alta) Ltd	Edmonton-Beyvelley
Canadian Coachways	Edmonton, B.C. boundary enroute to Dawson Creek
	Edmonton-Breton-Berry moor
	Edmonton-Lac La Biche
	Edmonton-Flatbush
Carbon Bus Lines	Carbon-Central Service Stn
Crown Coal Co Ltd	Edmonton-Starky Mine
	Edmonton-Banner Mine
Diamond Lines	Edmonton-Black Diamond Mines
Drayton Valley Bus Lines	Entwistle-Drayton Valley
Ferstay John	Mine employees Crownest Pass
Glenmore Cab Co	Calgary-Windsor Park, Glenmore & Manchester Districts
Grimshaw-Yellowknife Transportation	Peace River-Nonkewin
Highway Coach Lines Ltd.	Edmonton-Two Hills
Knox, John	Medicine Hat-Hilda
Lethbridge Northern Bus Lines	Lethbridge-Shaughnessy
	Lethbridge-Turin
Monden Transportation	Calgary-Turner Valley
	Calgary-Bragg Creek
Neilsen Bus Lines	Calgary-Hussar
Northland Arrow Lines	Edmonton-Barrhead
	Barrhead-Fort Assiniboine
Peace River Bus Lines	Spirit River-B.C. boundary
	Spirit River-Grande Prairie
	Spirit River-McLennan
	Fairview-High Prairie
Petrone, Guido	Hillcrest-Mohawk Mines
Ponoka Bus Lines	Ponoka-Provincial Mental Hospital
Reith Bus Lines	Lacombe-Rimby-Winfield
Riverdale Coal Co Ltd	Edmonton-Riverdale Mine
Sandulac & Switzer	Waterways-Ft. McMurray
Shaw, James H.	Edmonton-Tomahawk-Berry moor
Sorensen Bus Lines	Calgary-Stettler via Three Hills
	Red Deer-Veteran
	Red Deer-Rocky Mountain House
Southern Bus Lines	Lethbridge-Etzikom
Sunburst Motor Coaches	Camrose-Alliance
	Edmonton-Czar
	Edmonton-Chauvin
	Edmonton-St. Paul-Cold Lake
	Wetaskiwin-Winfield-Buck Lake
Taber Transport	Taber-Vauxhall
Taylor, Chas. H.	Sundre-Olds
Townsend Bus Lines	Drumheller-Stettler via Big Valley
United Mine Workers Ass'n	Lethbridge-Galt Mines
Van Wert T.	Medicine Hat-Redcliffe
Valley Bus Lines	Drumheller-East Coulee
	Drumheller-Wayne
	Drumheller-Nacmine
	Drumheller-Midland
Western Canadian Greyhound Lines Ltd.	Calgary-Drumheller Hanna
	Calgary-Edmonton
	Calgary-Lethbridge via Macleod
	Calgary-Banff
	Calgary-Medicine Hat
	Calgary-Lethbridge via Vulcan
	Edmonton-Lloydminster via Ft. Saskatchewan
	Edmonton-Lloydminster via Elk Island Park
	Edmonton to Jasper Park
	Lethbridge-Walsh
Western Motor Coaches	Macleod-Caird-ton-Waterton Lake
	Edmonton-Maverthorpe
	Edmonton-Lac La Nonne

The following comparative statement reveals the extent of the increase in Bus traffic over that of the previous year

	ACTUAL MILES TRAVELLED		Total Miles
	Dirt Roads	Surfaced Roads	
1946-47	545,028	4,751,787	5,296,815
1945-46	432,338	3,564,295	3,996,633
Increase	112,690	1,187,492	1,300,182

PASSENGER MILES TRAVELLED			
	Dirt Roads	Surfaced Roads	Total Miles
1946-47	15,392,092	143,299,187	158,691,279
1945-46	11,032,825	108,764,087	119,796,912
Increase	4,359,267	34,535,100	38,894,367

	Passengers Carried	Gas Consumed
1946-47	2,546,745	866,479 gallons
1945-46	2,420,165	708,763 gallons
Increase	126,580	157,716 gallons

The total number of licenses issued by the Board for Public Service and Commercial licenses increased from 37,566 for the fiscal year 1945-46 to 43,168 for the fiscal year 1946-47, an increase of 5,602.

LICENSES WERE CLASSIFIED AS FOLLOWS			
Buses	287	Commercial Vehicles	3,124
Liveries	661	C & U Restricted Area	2,974
School Vans	679	Government, Provincial, Federal and Municipal	1,868
Farm Trucks	23,624	Trailers	352
Drive Yourself Cars	45	Miscellaneous	2,407
Grain Hauling	237		
Public Service	6,910	TOTAL	43,168

PROVINCIAL GAOL, FORT SASKATCHEWAN

(J. D. McLEAN, *Warden*)

The daily average population during the year was 248.13

The general health of the inmates of this Institution has been excellent.

Farm operations this year shown by the following summary:

Item	Acreage	Yield
Wheat	205	6,239 bus
Oats	196	6,908 bus
Barley	177	4,218 bus
Flax	5½	61 bus
Hay	179	115 tons
Vegetables	53	Various

CASH STATEMENT SUMMARY

Gaol Operations (Including Administration)	\$ 97,857 99
Maintenance of Buildings and operation of Power Plant	34,487 56
Gross Cost	132,345 55
Less Revenue	19,311 52
Net Cost	\$113 034 03
Average Daily Population	248 13
Per Capita Cost per prisoner per day (Gaol Operations)	1 080
Building and Power Plant Cost	381
Gross per Capita Cost	1,461
Less Revenue per Capita	213
Net per Capita Cost	1 248

ANNUAL REPORT OF PRISONERS FOR THE YEAR ENDING MARCH 31, 1947

MALE

Total number of male prisoners admitted	Comm	Sent
Total number of male prisoners discharged	4	147
Male prisoners in gaol as at March 31, 1946	409	829
Male prisoners admitted during the year ending March 31, 1947	413	976
Total	401	761
Male prisoners discharged during the year ending March 31, 1947	12	215
Total male prisoners in gaol as at March 31, 1947		195 84
Daily average male prisoners year ending March 31, 1947		6 76
Daily average male prisoners serving outside points with the R C M Police year ending March 31, 1947		202 60
Total daily average male prisoners year ending March 31, 1947		

DISCHARGES

Time expired	615	Transferred to mental institute	7
Paroled	31	Released to immigration department	2
Fine paid	52	Out with military authorities	4
Transferred to R C M Police	415	Transferred to Prince Albert Penitentiary	9
Transferred to hospital	9	Released on bail	16
Out as witness			2
Total discharges			1162

SENTENCES

Under 30 days	61	6 months to 9 months	66
30 days to 2 months	321	9 months to 1 year	24
2 months to 3 months	85	1 year to 2 years less 1 day	77
3 months to 4 months	109	4 months to 5 months	35
5 months to 6 months	16	Previously shown	35
		Total	829

ANNUAL REPORT, 1946-47

41

REMISSIONS

Received full remission	616
Received part remission	1
Received no remission	545
Total	1162
Total remission earned	6868
Number participating	617
Average days earned per prisoner	11 13

COUNTRY OF BIRTH

Canada	581	Roumania	1
United States	45	Ukraine	5
England	16	Switzerland	1
Scotland	28	Finland	2
Ireland	29	Yugoslavia	1
Austria	15	Wales	2
Poland	20	France	1
Russia	9	Sweden	13
Germany	3	Galeria	2
Norway	18	Latvia	1
South Africa	1	Previously Shown	35
Total			829

AGES

Under 20 years	89	50 to 60 years	91
20 to 30 years	247	60 to 70 years	49
30 to 40 years	164	Over 70 years	12
40 to 50 years	142	Previously shown	35
Total			829

CRIMES

Against property	285
Against any other Act	111
Against religion and morals	308
Against the person	61
Against public law and order	29
Total	794
Previously shown and out for various reasons and now returned to complete sentence or additional sentence	35
Total	829

FEMALE REPORT

Total number of female prisoners admitted	461
Total number of female prisoners discharged	440
Female prisoners in gaol as at March 31, 1946	Comm 1 Sent 40
Female prisoners admitted year ending March 31, 1947	97 364
Total	98 404
Female prisoners discharged year ending March 31, 1947	95 345
Total female prisoners in gaol as at March 31, 1947	3 59
Daily average female prisoners year ending March 31, 1947	45 53

DISCHARGES

Time expired	198	Transferred to hospital	58
Paroled	5	Transferred to mental hospital	2
Fine paid	29	Released on bail	5
Released by Dr. Orr	46	Conviction quashed	3
Out with R C M Police	92	Out as witness	2
Total			440

REMISSIONS

Received full remission	196
Received no remission	244
Total	440
Total remission earned	1554
Number participating	196
Average per person	7 92

DEPARTMENT OF PUBLIC WORKS

SENTENCES

Under 30 days	11	6 months to 9 months	6
30 days to 2 months	135	9 months to 1 year	4
2 months to 3 months	57	1 year to 2 years less 1 day	8
3 months to 4 months	53	Indefinite	16
4 months to 5 months	8	Previously shown	64
5 months to 6 months	2	Total	364

COUNTRY OF BIRTH

Canada	254	Russia	1
United States	24	Scotland	2
England	12	Ireland	3
Poland	2	Norway	2
Previously shown	64	Total	364

AGES

Under 20 years	43	50 to 60 years	28
20 to 30 years	126	60 to 70 years	6
30 to 40 years	71	Previously shown	64
40 to 50 years	26	Total	364

CRIMES

Against property	29
Against any other Act	51
Against religion and morals	216
Against the person	4
Total	300
Previously shown sentenced, out for various reasons and now returned to complete sentence or additional sentence	64
Total	364

PROVINCIAL GAOL, LETHBRIDGE
(H. Holt, *Warden*)

The daily average population for the year ending March 31, 1947 was 172.32 an increase of 33.24 over the previous year.

The general health of the inmates was excellent.

Farm operations are shown by the following summary:

Item	Acreage	Yield
Wheat..	112	2,650 bus.
Oats..	115	5,878 bus.
Barley..	72	3,950 bus.
Potatoes	62	148 tons
Hay..	164	149 tons
Vegetables	17	Various

CASH STATEMENT--SUMMARY

Gaol operation (including administration)	\$77,269 28
Maintenance of buildings and operation of power plant	26,721 68
Gross Cost	\$103,990 96
Less Revenue	21,578 57
Net Cost	\$ 82,412 39
Daily average population	172.32
Per capita cost per prisoner per day	
Gaol operation	\$1 228
Buildings and Power Plant	.425
Gross per capita cost	\$1.653
Less Revenue per capita	.343
Net per capita cost	\$1 310

ANNUAL REPORT OF PRISONERS FOR THE YEAR ENDING MARCH 31, 1947

Total number of prisoners admitted during 1946-47	1006
Total number of prisoners discharged during 1946-47	1008

	Sent.	Comm.	Rem.
Number of prisoners in Gaol March 31, 1946	173	3	1
Number of prisoners admitted during 1946-47	911	34	61
Total	1084	37	62

Number of prisoners discharged during 1946-47	917	33	58
Number of prisoners in Gaol March 31, 1947	167	4	4
Total	1084	37	62

Daily average of prisoners during 1946-47	170 34
Daily average of prisoners serving sentences at outside points with R C M. Police during 1946-47	1 98
Total daily average of prisoners during 1946-47	172 32

DISCHARGES

Completion of sentence	798	To St. Michael's Hospital	8
Discharged to court	93	Military release	45
Deported	6	Released on Bond	1
Fine and costs paid	16	Executed	6
Ticket of leave	15		
Immediate release	5	Total	1008
To Ponoka Mental Hospital	2		
To Prince Albert Penitentiary	7		
Released on bail	6		

DEPARTMENT OF PUBLIC WORKS

SENTENCES

Under 30 days	187	Remanded	58
30 days to 2 months	399	To Prince Albert Penitentiary	18
2 months to 3 months	81	Total	996
3 months to 4 months	29	Previously shown	10
4 months to 6 months	63	Total	1006
6 months to 9 months	19		
9 months to 1 year	58		
1 year to 18 months	30		
18 months to 2 years	15		
Death sentence	5		
Committed for trial	34		
Number of prisoners who have served previous sentences			581
Number of days of remission earned during 1946-47			8956
Number of prisoners participating			844
Average per prisoner.			10 61

COUNTRY OF BIRTH

Canada	732	Austria	5
England	31	Finland	14
Ireland	41	Hungary	10
Newfoundland	1	Holland	2
Scotland	34	Germany	12
Wales	2	Italy	3
France	1	Roumania	1
China	2	Boukowina	1
Norway	15	Yugoslavia	1
Denmark	3	Japan	2
United States	53		
Sweden	14		996
Czechoslovakia	1	Previously shown	10
Russia	10		
Poland	5		1006

AGES

Under 20 years	120
Twenty to twenty-nine	299
Thirty to thirty-nine	196
Forty to forty-nine	169
Fifty to fifty-nine	106
Sixty to sixty-nine	77
Seventy and over	20
	996
Previously shown	10
	1006

CRIMES

Offences against Public Order, Internal and External	6
Offences against Administration of Law and Justice	3
Offences against Religion and Morals	187
Offences against the Person and Reputation	107
Offences against the Rights of Property	333
Wilful and Forbidden Acts	7
Attempts, Conspiracies, Accessories	6
Offences under Dominion Acts	131
Offences under Provincial Acts	179
Offences under Municipal By-Laws	2
Offences under the King's Rules and Regulations	35
	996
Previously shown	10
	1006

PREVIOUSLY SHOWN

One sentenced and three remanded men from Court, six sentenced men from St. Michael's Hospital	10
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